

## Message Text

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44

ACTION OES-05

INFO OCT-01 EUR-12 ISO-00 ERDA-07 ERDE-00 FEAЕ-00 EB-07

COME-00 L-02 NSF-02 SAJ-01 CIAE-00 INR-07 NSAE-00

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P 141506Z MAR 75

FM AMEMBASSY MOSCOW

TO SECSTATE WASHDC PRIORITY 8152

UNCLAS MOSCOW 3451

FOR OES/SCI/SEP AND EUR/SOV AND ERDA

E.O. 11652: N/A

TAGS: ENRG TECH UR

SUBJECT: US-USSR ENERGY AGREEMENT: SUPERCONDUCTING POWER  
TRANSMISSION

REF: MOSCOW 3186

1. EMBASSY HAS RECEIVED TWO ENGLISH LANGUAGE PROGRAMS.  
ONE EACH FOR THE U.S. DELEGATION ON (A) HIGH VOLTAGE  
TECHNOLOGY AND (B) HEAT TRANSFER AND FLUID FLOW.

2. THE PROGRAM FOR THE HIGH VOLTAGE TECHNOLOGY  
DELEGATION IS AS FOLLOWS:  
MARCH 23 ARRIVAL IN MOSCOW, AEROFLOT 581 AT 1725.  
ACCOMMODATIONS AT HOTEL "SPUTNIK".  
MARCH 24 1000-GENERAL DISCUSSION OF THE SCHEDULE AT  
KRZHIZHANOVSKIY POWER ENGINEERING INSTITUTE;  
LABORATORY OF HIGH VOLTAGE GAS DISCHARGE AND  
LIGHTENING PROTECTION. REPORTS ON "INVESTI-  
GATION OF HIGH VOLTAGE DISCHARGE UNDER NORMAL  
ATMOSPHERIC CONDITIONS" AND "EXPERIMENTAL  
INSTALLATIONS FOR STUDYING DIELECTRICS AT  
CRYOGENIC TEMPERATURES". QUESTIONS & ANSWERS.  
MARCH 25 FAMILIARIZATION WITH THE LABORATORY'S IN-  
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STALLATIONS: EXPERIMENTAL HIGH VOLTAGE

CRYOSTATS, TEST BED, AUTOMATED MEASURING  
COMPLEX. REPORT "RESULTS OF A STUDY ON  
FLASHOVER VOLTAGES OF SOLID DIELECTRICS AT  
LOW TEMPERATURES." QUESTIONS AND ANSWERS.  
MARCH 26 DISCUSSION OF THE FIRST EXPERIMENT ON  
FLASHOVER VOLTAGES IN FLUID HELIUM. REPORT  
"RESULTS OF A STUDY ON COMPRESSED HELIUM  
BREAKDOWN." QUESTIONS AND ANSWERS.  
MARCH 27 PARTICIPATION IN THE FIRST EXPERIMENT.  
REPORTS BY U.S. EXPERTS.  
MARC H 28 DISCUSSION OF THE FIRST EXPERIMENT AND THE  
SECOND ONE ON COMPRESSED HELIUM BREAKDOWN.  
PREPARATIONS FOR THE SECOND EXPERIMENT.  
MARCH 29 SIGHTSEEING, THEATERS.  
MARCH 30 SIGHTSEEING.  
MARCH 31 PRELIMINARY INFORMATION ON THE SECOND  
EXPERIMENT. REPORTS BY U.S. EXPERTS.  
PARTICIPATION IN THE SECOND EXPERIMENT.  
APRIL 1 DISCUSSION OF THE SECOND EXPERIMENT. REPORT  
"CORONA DISCHARGE AND HELIUM BREAKDOWN IN  
EXCEEDINGLY NON-UNIFORM FIELD."  
APRIL 2 DISCUSSION OF THE THIRD EXPERIMENT ON  
PULSED VOLTAGE HELIUM BREAKDOWN.  
PARTICIPATION IN THE EXPERIMENT.  
APRIL 3 INFORMATION ON THE RESULTS OF THE THIRD EX-  
PERIMENT. DISCUSSION OF THE JOINT EXPERIMENTS.  
APRIL 4 EXCHANGE OF OPINIONS ON FUTURE RESEARCH WORK  
IN THE U.S. AND USSR (WITH THE PARTICIPATION  
OF EXPERTS FROM MOSCOW POWER INSTITUTE,  
MOSENERGO, SIBERIAN POWER ENGINEERING INSTITUTE.)  
APRIL 5 SIGHTSEEING. BANQUET.  
APRIL 6 DEPARTURE OF U.S. EXPERTS.

3. THE PROGRAM FOR THE HEAT TRANSFER AND FLUID FLOW  
DELEGATION IS AS FLOWS:  
MARHC 23 ARRIVAL IN MOSCOW BY AEROLFOT 581, 1725.  
MARCH 24 GENERAL DISCUSSIONS OF THE SCHEDULE AT  
KRZHIZHANOVSKIY POWER ENGINEERING INSTITUTE.  
FAMILIARIZATION WITH INSTALLATIONS AT  
CRYOGENICS AND FLUID FLOW AND HEAT TRANSFER  
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LABORATORIES. DISCUSSION OF EXPERIMENTS.  
MARCH 25 INVESTIGATION OF FLUID FLOW CHARACTERISTICS  
ON A SIMULATING STAND. REPORTS: "PROBLEMS  
OF FLUID FLOW AND HEAT TRANSFER IN SUPER-  
CONDUCTING CABLES", "DEVELOPMENT OF  
METHODS FOR STUDYING FLUID FLOW AND HEAT  
TRANSFER WITH SINGLE PHASE FLUIDS IN THE  
NEAR-CRITICAL REGION", "DEVELOPMENT OF AN

OPTICAL METHOD FOR STUDYING FLUID FLOW

CHARACTERISTICS OF LOW TEMPERATURE HELIUM

FLOW". QUESTIONS AND ANSWERS.

MARCH 26 INVESTIGATION OF HEAT TRANSFER WITH HELIUM

FLOW IN A THREE-PHASE SUPERCONDUCTING CABLE

MODEL (CRYOGENICS LABORATORY). REPORT

"METHOD OF EXPERIMENTAL STUDY OF FLUID

FLOW AND HEAT TRANSFER OF HELIUM IN

SUPERCritical THERMODYNAMIC STATE".

"PROBLEMS OF INITIAL COOLDOWN OF SUPER-  
CONDUCTING CABLES". DISCUSSION.

10:QP P.M. DEPARTURE FOR KHARKOV.

MARCH 27 8:37 A.M. ARRIVAL IN KHARKOV. PHYSICO-  
TECHNICAL INSTITUTE OF LOW TEMPERATURES.

DISCUSSION OF THE SCHEDULE. FAMILIARIZATION  
WITH THE WORK CONDUCTED AT THE INSTITUTE.

MARCH 28 VISIT TO LABORATORIES. DISCUSSION ON  
FLUID FLOW AND HEAT TRANSFER.

MARCH 29 SIGHTSEEING, THEATERS.

MARCH 30 1:53 P.M. DEPARTURE FOR AND ARRIVAL IN MINSK.

MARCH 31 INSTITUTE OF HEAT AND MASS TRANSFER.

VISIT TO LABORATORY OF LOW TEMPERATURES.

APRIL 1 EXCHANGE OF OPINIONS ON FLUID FLOW AND  
HEAT TRANSFER RESEARCH CONDUCTED AT THE  
INSTITUTE AND IN THE U.S.

APRIL 2 INSTITUTE OF SOLID STATE PHYSICS AND SEMICONDUCTORS.

VISIT TO LABORATORIES. DISCUSSION OF

RESEARCH WORK ON HEAT TRANSFER.

22:22 P.M. DEPARTURE FOR MOSCOW.

APRIL 3 8:30 A.M. ARRIVAL IN MOSCOW. VISIT TO  
KURCHATOV ATOMIC ENERGY INSTITUTE.

DISCUSSION.

APRIL 4 DISCUSSION OF THE JOINT EXPERIMENTS.

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EXCHANGE OF OPINIONS ON FUTURE RESEARCH

WORK IN THE U.S. AND USSR.

APRIL 5 SIGHTSEEING. BANQUET.

APRIL 6 DEPARTURE OF U.S. EXPERTS.

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## Message Attributes

**Automatic Decaptoning:** X  
**Capture Date:** 01 JAN 1994  
**Channel Indicators:** n/a  
**Current Classification:** UNCLASSIFIED  
**Concepts:** ENERGY, AGREEMENTS, RESEARCH, SCIENTIFIC VISITS, ELECTRIC POWER  
**Control Number:** n/a  
**Copy:** SINGLE  
**Draft Date:** 14 MAR 1975  
**Decaption Date:** 01 JAN 1960  
**Decaption Note:**  
**Disposition Action:** n/a  
**Disposition Approved on Date:**  
**Disposition Authority:** n/a  
**Disposition Case Number:** n/a  
**Disposition Comment:**  
**Disposition Date:** 01 JAN 1960  
**Disposition Event:**  
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**Enclosure:** n/a  
**Executive Order:** N/A  
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**Office:** ACTION OES  
**Original Classification:** UNCLASSIFIED  
**Original Handling Restrictions:** n/a  
**Original Previous Classification:** n/a  
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**Page Count:** 3  
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**Reference:** 75 MOSCOW 3186  
**Review Action:** RELEASED, APPROVED  
**Review Authority:** ShawDG  
**Review Comment:** n/a  
**Review Content Flags:**  
**Review Date:** 23 JUN 2003  
**Review Event:**  
**Review Exemptions:** n/a  
**Review History:** RELEASED <23 JUN 2003 by BalzMJ>; APPROVED <02 MAR 2004 by ShawDG>  
**Review Markings:**

Margaret P. Grafeld  
Declassified/Released  
US Department of State  
EO Systematic Review  
05 JUL 2006

**Review Media Identifier:**  
**Review Referrals:** n/a  
**Review Release Date:** n/a  
**Review Release Event:** n/a  
**Review Transfer Date:**  
**Review Withdrawn Fields:** n/a  
**Secure:** OPEN  
**Status:** NATIVE  
**Subject:** US-USSR ENERGY AGREEMENT: SUPERCONDUCTING POWER TRANSMISSION  
**TAGS:** ENRG, TECH, UR, US  
**To:** STATE  
**Type:** TE  
**Markings:** Margaret P. Grafeld Declassified/Released US Department of State EO Systematic Review 05 JUL 2006